

on an X-line;

an infrared rays receiving element mounted on the substrate at a position on the X-line;

a first lens elongated in a direction of the X-line and provided on the infrared rays emitting elements; and

a semispherical second lens provided on the infrared rays receiving element;

the first lens having an elongated convex shape and a length longer than a length of the arrangement of the infrared rays emitting elements so as to expand infrared rays radiation range in the direction of the X-line.

Please cancel claims 4 and 7.

IN THE SPECIFICATION:

Please replace the paragraph between page 1, line 28 and page 2, line 6, with:

The infrared LED elements and others are covered by a light transmissive resin 7 such as an epoxy resin in which a visible rays cutting material is included. The infrared LED elements are covered by resin 7a and the photodiode is covered by resin 7b. Thus, the resin 7 allows the infrared LED and the photodiode to emit and receive the light, and also protects the elements.

Page 3, line 20, please replace the paragraph containing the description of Fig. 3 with:

Fig. 3 shows a radiation pattern in the Y line section;

Page 3, line 21, please replace the paragraph containing the description of Fig. 4 with:

a4

Fig. 4 shows a radiation pattern in the X line section;

Page 3, line 24, please replace the paragraph containing the description of Fig. 6 with:

a5

Fig. 6 shows a radiation pattern in the X line section;

Please replace the paragraph between page 4, line 28 and page 5, line 2 with:

a6

As shown in Fig. 3, the radiation pattern D of the infrared rays emitted from the infrared LED elements 11 is narrow in the Y direction.